In The Claims:

Please amend claims 1-18, as follows.

1. (Currently Amended) A device for forming an image from a plurality of sub images, the device comprising ~~which is composed of a plurality of sub-areas (T_1 to T_N), which device includes~~

- a single-surface detector which includes a plurality of sensor elements for generating image data, said sensor elements arranged in groups for forming a plurality of sub-areas (T1 to TN) of the image, where each sub-image corresponds to each sub-area;
- read-out units (V_1 to V_N) ~~which are~~ associated with the sub-areas (T_1 to T_N) of the image,
- an analysis unit ~~(12) which is~~ arranged to evaluate image data from adjoining image areas (S_{63} and S_{66}) of neighboring sub-areas (T_1 and T_2) and to generate correction data, and
- a correction unit ~~(13) which is~~ arranged to correct incorrect image data by means of the correction data.

2. (Currently Amended) The~~A~~ device as claimed in claim 1, wherein ~~characterized in that~~ the ~~detector includes a plurality of~~ sensor elements ~~which are~~ arranged in rows and columns forming a matrix.

3. (Currently Amended) The~~A~~ device as claimed in claim 2~~1~~, wherein the ~~characterized in that~~ rows or columns, or parts thereof, constitute an image area, that a plurality of image areas constitute a sub-area, and wherein~~that~~ amplifiers are included ~~arranged so as~~ to read out image data from the sub-areas.

4. (Currently Amended) The~~A~~ device as claimed in claim 1, further comprising ~~characterized in that~~ ~~there is provided~~ a memory ~~(14)~~ for storing the correction data.

5. (Currently Amended) The~~A~~ device as claimed in claim 1, wherein ~~characterized in that~~ the image data is applied to the analysis unit ~~(12)~~ at a reduced rate.

6. (Currently Amended) TheA device as claimed in claim 3~~1~~, wherein ~~characterized in that~~ the analysis unit ~~(12)~~ is arranged to receive image data from adjoining columns of neighboring amplifiers, and
includes a histogram generator ~~(15)~~ for generating histograms of the image data received, and
a summing unit ~~(16)~~ for forming cumulative histograms from the histograms, and
an adaptation unit ~~(17)~~ for forming a functional dependency between the amplification characteristics of the amplifiers of neighboring columns and for generating correction data.

7. (Currently Amended) TheA device as claimed in claim 6, wherein ~~characterized in that~~ the histogram generator ~~(15)~~ is arranged to receive the image data and to generate histograms over a selectable period of time.

8. (Currently Amended) TheA device as claimed in claim 1, wherein ~~characterized in that~~
the analysis unit further comprising ~~(12) includes~~
means ~~(20)~~ for forming an estimated value (SW_{65}) for the image value (GW_{65}) of a pixel (P_{65}) of a sub-area (T_2) to be corrected, the pixel (P_{65}) being situated at a boundary (G) with a neighboring sub-area (T_1), while utilizing an image value (GW_{64}) of the adjoining image area (S_{64}) of the neighboring sub-area (T_1), and
means ~~(21, 22)~~ for forming a correction value for the relevant image value (GW_{65}) in the sub-area (T_2) to be corrected by comparison of the actual image value SW_{65} of the pixel (P_{65}) with the estimated value (SW_{65}).

9. (Currently Amended) TheA device as claimed in claim 8, wherein ~~characterized in that~~
the analysis unit further comprises ~~includes~~ means ~~(20)~~ for extrapolating across the boundary (G) the image values (GW_{63}, GW_{64}) of pixels (P_{63}, P_{64}) of an image area (S_{63}, S_{64}) of the neighboring sub-area (T1), adjoining the pixel (P_{65}) of the sub-area (T_2) to be corrected.

10. (Currently Amended) A method of forming an image using image data acquired from ~~which is composed of~~ a plurality of sub-areas (T_1 to T_N) of a flat dynamic x-ray detector, wherein a read-out unit (V_1 to V_N) is associated with each sub-area, and wherein

~~characterized in that~~ the

image data from adjoining image areas (S_{63} and S_{66}) of neighboring sub-areas (T_1 and T_2) is evaluated in order to mitigate differences between amplifier characteristics.

11. (Currently Amended) The~~A~~ method as claimed in claim 10, further including determining

~~characterized in that~~

an estimated value (SW_{65}) ~~is determined~~ for an image value (GW_{65}) of a pixel (P_{65}) of a sub-area (T_2) to be corrected, the pixel (P_{65}) located ~~being situated~~ at a boundary (G) with a neighboring sub-area (T_1), said estimating carried out ~~while~~ utilizing the image value (GW_{64}) of a pixel (P_{64}) of the adjoining image area (S_{64}) of the neighboring sub-area (T_1), and determining a correction value for the relevant image value (GW_{65}) in the sub-area (T_2) to be corrected ~~being determined~~ by comparison of the actual image value (GW_{65}) of the pixel (P_{65}) and the estimated value (SW_{65}).

12. (Currently Amended) The~~A~~ method as claimed in claim 10, further including using

~~characterized in that~~

a directly adjacent pixel of the neighboring sub-area ~~is used~~ as the estimated value of the image value.

13. (Currently Amended) The~~A~~ method as claimed in claim 10, further including extrapolating

~~characterized in that~~

the image values (GW_{63}, GW_{64}) of pixels (P_{63}, P_{64}) of the adjoining image area (S_{63}, S_{64}) of the neighboring sub-area (T_1), ~~are extrapolated~~ across the boundary (G) in order to determine the estimated value (SW_{65}).

14. (Currently Amended) The~~A~~ method as claimed in claim 10, further including forming

~~characterized in that~~

a first correction value ~~is formed~~ for the image value (GW_{65}) of a pixel (P_{65}) of the sub-area (T_2) to be corrected, and determining an estimated value (SW_{64}) for the neighboring pixel (P_{65}) ~~is determined~~ for a neighboring pixel (GW_{64}) of the neighboring sub-area (T1), directly adjoining this pixel (P_{65}) of the sub-area (T_2) to be corrected, the forming and determining~~while~~ utilizing image values (GW_{65}, GW_{66}) of the sub-area (T_2) to be corrected, forming a second correction value ~~being formed~~ by comparison of the estimated value (GW_{64}) and the actual image value (GW_{64}) of the neighboring pixel (P_{64}), and forming a common correction value for the relevant image value (GW_{65}) of the sub-area (T_2) to be corrected ~~being formed~~ from the first and the second correction value.

15. (Currently Amended) The~~A~~ method as claimed in claim 10, further including forming ~~characterized in that~~
a common correction value for the relevant image value in the sub-area to be corrected ~~is formed~~ from the correction values for the same image values of different pixels of the sub-area to be corrected.

16. (Currently Amended) The~~A~~ method as claimed in claim 10, further including storing ~~characterized in that~~
the correction values for the image values of the individual sub-areas (T_1 to T_N) ~~are stored~~ in an adaptation table (LUT) and are fetched from this table (LUT) for correction.

17. (Currently Amended) An X-ray examination apparatus which includes
an X-ray source for emitting X-rays and for forming an X-ray image,
a flat dynamic ~~an~~ X-ray detector for forming an optical image from the X-ray image, which detector includes sensor elements arranged in rows and columns and at least two amplifiers (V_1 to V_N) for reading out detected image data, at least one amplifier being associated with each of a plurality of sub-areas ~~sub-area~~ (T_1 to T_N) in order to read out detected image data, comprising ~~characterized in that the apparatus includes~~
an analysis unit ~~(12)~~ for forming correction data on the basis of the evaluation of image data from adjoining image areas (S_{64} and S_{65}) of neighboring sub-areas (T_1 and T_2), and

a correction unit ~~(13)~~ for correcting the incorrect image data by means of the correction data.

18. (Currently Amended) A computer program for the correction of image data derived from ~~of an image~~ a single-surface detector comprising ~~which is composed of~~ a plurality of sub-areas (T_1 to T_N), wherein a respective read-out unit (V_1 to V_N) is associated with sub-areas (T_1 to T_N) of the image and image data from image areas (S_{64} and S_{65}) of adjoining sub-areas (T_1 and T_2) of neighboring read-out units (V_1 and V_2) is evaluated by formation of histograms in order to generate correction data after integration of the histograms, which correction data is used to adapt the image data from one sub-area (T_2) to the amplifier characteristic of the read-out unit (V_1) which amplifies the adjoining sub-area (T_1).